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Permit Fact Sheet

1 General Information

Permit Number:	WI-0037842-07-0
Permittee Name:	KIMBERLY CLARK CORP NEENAH PAPER
Address:	PO Box 2003
City/State/Zip:	NEENAH WI 54957-2003
Discharge Location:	Neenah
Receiving Water:	Fox River via the Neenah Channel
StreamFlow (Q _{7,10}):	135 cfs
Stream Classification:	Warm Water Sportfish and Public Water Supply

2 Facility Description

Kimberly-Clark's Neenah Paper Mill (KC) manufactures fine business and writing papers. An average of approximately 2.4 million gallons per day of process wastewater is treated in an activated sludge treatment plant and discharged to the Fox River (through Outfall 001) via the Neenah channel.

An outfall location map and water balance diagram are attached for reference. The attached water quality based limits recommendations by the Water Quality Standards Section (WQS) for this permit reissuance dated July 16, 2003 contains additional information on nearby dischargers and the Neenah channel of the Fox River.

Sample Point Designation		
Sample Point Number	Discharge Flow, Units, and Averaging Period	Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable)
704		New DMR Sample Point for Reporting Results of Voluntary Monitoring of Intake Water for Mercury
001	2.4 MGD Annual Average (reported on the Permit Reissuance Application)	Treated Process Wastewater from the Activated Sludge Treatment System Sampled Prior to Discharge to the Fox River
005		Discharge Monitoring Report Form Information for WLA Requirements (for treated wastewater discharge thru Outfall 001)
101		New DMR Sample Point for Reporting Mercury Field Blank Results

3 Influent - Proposed Monitoring

3.1 DMR Sample Point Number: 704- Mercury Intake Water Results

3.1.1 Changes from Previous Permit:

A new sample point has been added to the DMRs (Discharge Monitoring Reports) for reporting results of voluntary monitoring of intake water for mercury. This sample point is not included in the permit, as requested by KC.

3.1.2 Explanation of Limits and Monitoring Requirements

The permittee may voluntarily report mercury intake water monitoring results to coincide with quarterly mercury effluent results to continue to document that mercury is not added to the discharge above intake levels in the receiving water.

4 Inplant - Proposed Monitoring and Limitations

4.1 DMR Sample Point Number: 101- Mercury Field Blank Results

4.1.1 Changes from Previous Permit:

A new sample point has been added to the DMRs (Discharge Monitoring Reports) for reporting field blank results for mercury monitoring of intake water and effluent. The permit requirement to report the mercury field blank results is included in footnote 1.2.1.2 of the surface water section requirements for Outfall 001.

4.1.2 Explanation of Limits and Monitoring Requirements

The permittee is required to report mercury field blank results when mercury monitoring is conducted in accordance with NR 106.145(9), Wis. Adm. Code.

5 Surface Water - Proposed Monitoring and Limitations

5.1 Sample Point Number: 001- Treated Process Wastewater

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
BOD5, Total	Monthly Avg	1,261 lbs/day	Daily	24-Hr Comp	
BOD5, Total	Daily Max	2,374 lbs/day	Daily	24-Hr Comp	
Suspended Solids, Total	Monthly Avg	1,558 lbs/day	Daily	24-Hr Comp	
Suspended Solids, Total	Daily Max	3,021 lbs/day	Daily	24-Hr Comp	
Temperature	Daily Max	120 deg F	Daily	Continuous	
Phosphorus, Total	Rolling 12 Month Avg	1.0 mg/L	2/Month	24-Hr Comp	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
	Month Avg				
Nitrogen, Ammonia (NH ₃ -N) Total		mg/L	Monthly	24-Hr Comp	Monthly testing is required only in calendar year 2007
Mercury, Total Recoverable		ng/L	Quarterly	Grab	
Acute WET		TUa	Annual	24-Hr Comp	
Chronic WET		rTUc	Annual	24-Hr Comp	
pH (Continuous)			Daily	Continuous	See permit footnote 1.2.1.1 "Continuous pH Monitoring" below for categorical pH limits (5 s.u. min and 9.0 s.u. max and allowed excursions

5.1.1 Changes from Previous Permit

The ammonia monitoring frequency has been changed from four times per year (monthly from May thru October) to monthly during calendar year 2007 only. Monitoring 4 times per year (monthly from May thru October) for total kjeldahl nitrogen and nitrate plus nitrite nitrogen has not been retained. Acute and chronic whole effluent toxicity testing has been increased to annually from 3 times during the previous permit term. The categorical limits for BOD₅ have been decreased (monthly average reduced from 1460 lbs/day to 1261 lbs/day and daily maximum reduced from 2719 lbs/day to 2374 lbs/day). A reopener for increasing categorical limits for BOD and TSS has not been retained in this permit reissuance. Quarterly Mercury monitoring has been added.

5.1.2 Explanation of Limits and Monitoring Requirements

Water Quality Based Limits and WET Requirements

The rationale for water quality based limits and whole effluent toxicity (WET) testing requirements is presented in the attached Water Quality Standards Section (WQS) recommendations, dated July 16, 2003. The rationale is included for ammonia monitoring monthly during calendar year 2007 and elimination of monitoring for TKN and Nitrate plus Nitrite Nitrogen. Documentation is included for annual acute and chronic whole effluent toxicity monitoring (also see the current version of the Whole Effluent Toxicity Program Guidance Document and checklist and WET information, guidance and test methods at <http://www.dnr.state.wi.us/org/water/wm/ww/biomon/biomon.htm>). The temperature limit of 120 deg F and continuous monitoring requirement is retained from the previous permit. Mercury monitoring requirements are explained further below.

Mercury Monitoring

Mercury monitoring requirements are included in the permit in accordance with s. NR 106.145 Wis. Adm. Code (effective 11/01/2002 - See <http://www.dnr.state.wi.us/org/water/wm/ww/mercury/mercury.htm>). No net discharge of mercury was reported with the permit reissuance application by Kimberly Clark as intake monitoring results for mercury were higher than effluent results (see WQS memo of 7/16/03 for mercury data). During the term of the previous permit Kimberly Clark voluntarily conducted a study to identify sources of mercury and implemented mercury source reduction measures. Consistent with NR 106.145(3), quarterly monitoring is included to continue to verify that there is no net discharge of mercury. Additionally, a compliance schedule provision requires an annual report evaluating mercury data and

documenting any continuing reasonable cost effective efforts to identify and reduce any potential sources of mercury in the effluent.

Voluntary intake monitoring to coincide with effluent monitoring will be reported on a new influent DMR sample point 704, as discussed above. Required mercury field blank monitoring will be reported on a new inplant DMR sample point 101, as discussed above.

Phosphorus

The limit and monitoring requirements for phosphorus are unchanged from the previous permit. Chapter NR 217 of the Wis. Adm. Code limits industrial dischargers of more than 60 pounds of phosphorus per month to a 1.0 mg/L total phosphorus effluent limitation unless an alternative limit is approved. (See implementation guidance for NR 217 alternative phosphorus limits dated July 1999 at <http://www.dnr.state.wi.us/org/water/wm/wqs/217.htm>).

Categorical Limits for BOD₅, TSS and pH

Categorical effluent limits for BOD₅, TSS and pH for Outfall 001 are based on categorical standards for the pulp and paper industry, nonintegrated fine paper subcategory and tissue paper subcategory (NR 284, Wis. Adm. Code and 40 CFR 430, Subpart R and Subpart Q), as detailed further below.

TSS and pH

Categorical effluent limits for TSS and continuous pH in Table 5.1 above are identical to the limits contained in the previous permit. Categorical limit calculations for TSS appear in the appendix table attached based on information submitted by KC in the 2003 permit reissuance application. Graphs of TSS vs time from 1999 – 2003 attached illustrate effluent quality well below these categorical TSS limits (see other comments below for details)

BOD₅

Categorical effluent limits for BOD₅ in Table 5.1 above have been reduced slightly from the limits contained in the previous permit (monthly average reduced from 1460 lbs/day to 1261 lbs/day and daily maximum reduced from 2719 lbs/day to 2374 lbs/day). Graphs of BOD₅ vs time from 1999 – 2003 attached illustrate effluent quality well below these categorical BOD₅ limits (see other comments below for details).

A summary of categorical BOD₅ limits calculations appears in the appendix table attached for actual and committed production based on information submitted by Kimberly Clark in the 2003 permit reissuance application. These categorical calculations are similar to those in the previous permit except to account for recent changes in manufacturing operations which included removal of old Paper Machine No. 1 on June 1, 2002 (with ~11 tons/day for recently reported production avg.). Limited rag pulp production of 5.9 tons/day also ceased. The categorical calculations include retaining BPT limits for remaining existing fine paper wood fiber furnish production processes from previous permit reissuances. Additional “new source” production of fine paper is reported at a ratio of approximately 80% wood fiber furnish and 20% cotton fiber furnish. Categorical limits based on BPT are also retained from the previous permits for the experimental tissue paper mill (4 tons/day) in accordance with the Tissue Paper Deinking Subcategory of the pulp and paper regulations.

Categorical limits for trichlorophenol and pentachlorophenol are not applicable since a certification of non-use of chlorophenolic containing biocides was submitted with the permit reissuance application.

A reopener has not been retained from the previous permit (previous permit condition Part IA(3)) which provided for conditions needed for any potential increase in categorical limits.

5.2 Sample Point Number: 005- WATER QUALITY INFO FOR WLA (for discharge thru Outfall 001)

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow River		cfs	Daily	Continuous	
WLA Previous 4 Day Avg River Flow		cfs	Daily	Calculated	
WLA Previous Day River Temp		deg F	Daily	Continuous	
WLA Value		lbs/day	Daily	Calculated	
WLA Adjusted Value		lbs/day	Daily	Calculated	
BOD5, Total	Daily Max - Variable	lbs/day	Daily	24-Hr Comp	
WLA 7 Day Sum Of WLA Values		lbs/day	Daily	Calculated	
WLA 7 Day Sum Of BOD5 Discharged	Daily Max - Variable	lbs/day	Daily	Calculated	

5.2.1 Changes from Previous Permit

There are no changes to the WLA requirements for discharge thru Outfall 001 to the Fox River.

5.2.2 Explanation of Limits and Monitoring Requirements

Wasteload allocated BOD₅ limits which apply from May thru October are identical to the previous permit limits in accordance with NR 212 Wis. Adm. Code. The more stringent of the WLA or Categorical BOD₅ limits apply.

6 Compliance Schedules

6.1 Mercury Annual Report

Required Action	Date Due
Annual Status Report: The permittee shall submit to the Department an annual status report to summarize and evaluate quarterly mercury effluent monitoring data and other relevant information such as intake water data voluntarily collected to document background levels of mercury. The report shall also document any continuing reasonable cost effective efforts to identify and reduce any potential sources of mercury in the effluent. The first annual report shall be due on January 31, 2005 with subsequent annual reports also due on January 31st for the previous calendar year.	

6.2 Explanation of Compliance Schedules

An annual status report evaluating mercury intake and effluent data has been required to continue to document that there is no net discharge of mercury. In consultation with Kimberly Clark, it has also been required that the report document continuing cost effective efforts to identify and reduce any potential sources of mercury in the effluent. These efforts to reduce sources of mercury were initiated and implemented during the previous permit.

7 Special Reporting Requirements

NA

8 Other Comments:

DMR data for BOD₅ and TSS is attached for 1999 – 2003 as available from the DNR's wastewater database (SWAMP). Graphs of BOD₅ and TSS vs. Time for daily values and monthly averages are also attached. For Daily Values of TSS and BOD₅ reported less than detectable, daily graphed values were set at the reported value instead of zero. The accuracy of the data in the SWAMP database is subject to correction if errors are discovered in keying or reporting.

9 Attachments:

Substantial Compliance Determination dated 8/8/03

Water Flow Schematic(s)

Map(s)

Categorical Limits Calculations

Water Quality Based Effluent Limits

WET Checklist Summary

Public Notice

Quantitative Description of Discharges (BOD and TSS data from 1999 –2003) and graphs in excel spreadsheets

10 Proposed Expiration Date:

December 31, 2008

Prepared By:

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Date: November 2003

cc: **NER and Jim Savinski Oshkosh Office and EPA Region 5**